

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace, without prejudice, all prior versions and listings of claims in the application.

Claim 1 (Currently Amended): ~~An isolated~~ A purified glycoprotein comprising the human amino acid primary structure of CD55 and a tumor-specific N-linked glycostructure, wherein said glycoprotein ~~is isolated from a membrane preparation of gastric adenocarcinoma cells by chromatographic processes and~~ has an apparent molecular weight of about 82 kD in sodium dodecyl sulfate polyacrylamide gel electrophoresis and is a glycoprotein present on adenocarcinoma cell line 23132 (DSMZ Accession No. DSM ACC 201), but not on a normal cell.

Claims 2-3 (Cancelled).

Claim 4 (Previously Presented): A process for obtaining a glycoprotein comprising the human amino acid primary structure of CD55 and a tumor-specific N-linked glycostructure, the process comprising producing a membrane preparation from cells of the human adenocarcinoma cell line 23132, and obtaining the glycoprotein therefrom by size-exclusion chromatography, wherein the glycoprotein has an apparent molecular weight of about 82 kD in sodium dodecyl sulfate polyacrylamide gel electrophoresis, and is a glycoprotein present on adenocarcinoma cell line 23132 (DSMZ Accession No. DSM ACC 201), but not on a normal cell.

Claims 5-41 (Cancelled).

Claim 42 (Previously Presented): A process for obtaining a glycoprotein comprising the human amino acid primary structure of CD55 and a tumor-specific N-linked glycostructure, the process comprising producing a membrane preparation from cells of the human adenocarcinoma cell line 23132, and obtaining the glycoprotein therefrom by anion-exchange chromatography, wherein the glycoprotein has an apparent molecular weight of about 82 kD in sodium dodecyl sulfate polyacrylamide gel electrophoresis, and is a glycoprotein present on adenocarcinoma cell line 23132 (DSMZ Accession No. DSM ACC 201), but not on a normal cell.

Claim 43 (Currently Amended): The ~~isolated~~ purified glycoprotein of claim 1, wherein said glycoprotein, if present on a cell and bound by an antibody that is specific for said glycostructure, results in apoptosis of said cell.

Claim 44 (Cancelled).

Claim 45 (Currently Amended): The ~~isolated~~ purified glycoprotein of claim 43, wherein binding of said antibody to said glycostructure results in cleavage of cytokeratin 18 in said cell.

Claim 46 (Currently Amended): The ~~isolated~~ purified glycoprotein of claim 43, wherein binding of said antibody to said glycostructure results in increased c-myc expression in said cell.

Claim 47 (Currently Amended): The ~~isolated~~ purified glycoprotein of claim 43, wherein binding of said antibody to said glycostructure results in decreased topoisomerase II α expression in said cell.

Claim 48 (Currently Amended): The ~~isolated~~ purified glycoprotein of claim 43, wherein binding of said antibody to said glycostructure results in an increase in intracellular Ca²⁺ concentration in said cell.

Claim 49 (Currently Amended): The ~~isolated~~ purified glycoprotein of claim 43, wherein binding of said antibody to said glycostructure does not induce cleavage of poly(ADP-ribose)-polymerase in said cell.

Claims 50-58 (Cancelled).

Claim 59 (Currently Amended): ~~An isolated~~ A purified glycoprotein comprising the human amino acid primary structure of CD55 and a tumor-specific glycostructure obtained by the process of claim 4.

Claim 60 (Currently Amended): ~~An isolated~~ A purified glycoprotein comprising the human amino acid primary structure of CD55 and a tumor-specific glycostructure obtained by the process of claim 42.

Claim 61 (New): A purified glycoprotein comprising a section of a glycosylated human CD55 protein expressed by adenocarcinoma cell line 23132 (DSMZ Accession No. DSM ACC 201), but not by a normal cell, wherein said glycosylated human CD55 protein has an apparent molecular weight of about 82 kD in sodium dodecyl sulfate polyacrylamide gel electrophoresis and wherein said section of said glycosylated human CD55 protein comprises a tumor-specific N-linked glycostructure.

Claim 62 (New): The purified glycoprotein of claim 61, wherein an antibody that specifically binds said tumor-specific N-linked glycostructure of said section, upon binding, induces apoptosis of a cell expressing said glycosylated human CD55 protein.

Claim 63 (New): The purified glycoprotein of claim 62, wherein binding of said antibody to said glycostructure results in cleavage of cytokeratin 18 in said cell.

Claim 64 (New): The purified glycoprotein of claim 62, wherein binding of said antibody to said glycostructure results in increased c-myc expression in said cell.

Claim 65 (New): The purified glycoprotein of claim 62, wherein binding of said antibody to said glycostructure results in decreased topoisomerase II α expression in said cell.

Claim 66 (New): The purified glycoprotein of claim 62, wherein binding of said antibody to said glycostructure results in an increase in intracellular Ca²⁺ concentration in said cell.

Claim 67 (New): The purified glycoprotein of claim 62, wherein binding of said antibody to said glycostructure does not induce cleavage of poly(ADP-ribose)-polymerase in said cell.